



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,694	09/11/2001	Shunpei Yamazaki	07977/283001/US5205/5210/	8590

26171 7590 08/30/2006

FISH & RICHARDSON P.C.
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

LIANG, REGINA

ART UNIT	PAPER NUMBER
----------	--------------

2629

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/954,694	Applicant(s) YAMAZAKI ET AL.	
	Examiner Regina Liang	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-128 is/are pending in the application.
- 4a) Of the above claim(s) 2-8, 10, 11, 14, 15, 18, 19, 22-28, 30, 31 and 33-128 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 9, 12, 13, 16, 17, 20, 21, 29 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/20/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to amendment filed 6/20/06. Claims 1-128 are pending. Claims 2-8, 10, 11, 14, 15, 18, 19, 22-28, 30, 31, 33-128 have been withdrawn.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1, 9, 12, 13, 16, 21, 29, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimazu (US. PAT. NO. 6,784,874) in view of Misawa et al (US. PAT NO. 5,616,936 hereinafter Misawa).

As to claim 1, Shimazu discloses an electronic device (portable information terminal) comprising a plurality of operation keys (see Fig. 2 and 3 for example, keys 12), each of the operation keys comprising: a transparent button (col. 7, lines 4-12; col. 9, lines 14-15); a pixel portion formed below the button (LCD 2 has display portions 11 formed below the key portion 12); a driver circuit for controlling the pixel portion (col. 7, lines 16-25, col. 8, lines 24-30; the PC board 17 inherent has a driver circuit for controlling the display portion to display texts or image on the LCD 2); wherein a signal to be input as information to the electronic device by the operation keys is displayed in the pixel portion (col. 7, lines 16-39, col. 8, lines 5-6, 24-30 for example).

Shimazu does not specifically disclose a gate driver circuit and a source driver circuit for controlling the pixel portion, and each of the pixel portion, the gate driver circuit and the source driver circuit comprises a plurality of TFTs.

However, Fig. 1 of Misawa teaches a display device comprising a gate driver circuit (21) and a source driver circuit (12) for controlling the pixel portion (22), and each of pixel portion, gate driver circuit and the source driver circuit comprising a plurality of TFTs (col. 4, lines 22-29, 59-61, col. 5, lines 19-24 for example). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display device of Shimazu to have the feature as taught by Misawa so as to provide an improved miniaturized active matrix panel that is low in price and high in resolution and reliability (col. 2, lines 44-55 of Misawa).

As to claims 9 and 12, note the discussion of claim 1 above. Furthermore, Shimazu teaches the electronic device having a controller (IC chip) and the IC chip including a memory (col. 14, lines 24-29 for example).

As to claims 13, 16, Shimazu teaches the controller (IC chip) including a memory (col. 14, lines 24-29), thus, the controller and the memory are formed over the same substrate.

As to claims 21, 29 and 32, Shimazu teaches the display comprising a plurality of pixels comprising EL elements (col. 7, lines 62-63).

4. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimazu and Misawa as applied to claims 9 and 12 above, and further in view of Motegi et al (US. PAT. NO. 6,246,388).

Shimazu as modified by Misawa does not disclose the memory is one of a flash memory and a mask ROM. However, Motegi teaches a memory device comprising a mask ROM (col. 2, lines 2-4). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the memory of Shimazu as modified by Misawa to comprising a

mask ROM as taught by Motegi so as to provide a non-volatile memory with character data that is less likely to change.

Response to Arguments

5. Applicant's arguments with respect to claims 1, 9, 12, 13, 16, 17, 20, 21, 29 and 32 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's election filed on 2/13/06 indicated that claims 1, 9, 12, 13, 17, 21, 29 and 32 read on the elected species, the election did not include claims 16 and 20 in the elected species, therefore claims 16 and 20 were withdrawn from consideration in the previous action.

Applicant's remarks filed on 6/20/06 indicating that claims 16 and 20 also read on the elected species, since claims 16 and 20 (depend from claim 12) are the same as claims 13 and 17 (depend from claim 9), respectively. Thus, the above rejection regarding claims 16 and 20 raised new ground(s) of rejection necessitated by applicant's remarks.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

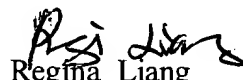
Art Unit: 2629

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Regina Liang
Primary Examiner
Art Unit 2674

7/11/06